

## **REMARKS**

Presently, claims 1-11, 17-24 and 46-49 and 51-52 are pending and under rejection. Claims 9, 12-16, 25-26, 34 and 36-40 have previously been cancelled, claims 27-33, 35, 41-43 and 50 have previously been withdrawn and new claims 53 and 54 are newly added herein. Reexamination and reconsideration of the claims is respectfully requested in view of the following remarks.

### **Rejections Under 35 U.S.C. §112, First Paragraph – Written Description**

The Examiner has maintained the rejection of claims 1-8, 10, 11, 17-24, 46-49 and 51-52 under 35 U.S.C. §112, first paragraph, "as failing to comply with the written description requirement." Applicants respectfully disagree with the Examiner and traverse the rejection.

The claims are drawn to a *B. oleracea* plant having clubroot resistance. The claims require that the plant have a resistance to clubroot that is monogenic and dominant, wherein the resistance is obtained from a *B. rapa* plant. A *B. oleracea* plant having these characteristics is set forth in the specification. Additionally, the claimed limitations are discussed throughout the specification. In Applicants' response of December 7, 2007, the Examiner was pointed to specific instances within the specification where these limitations are discussed. Those arguments are herein incorporated by reference, and the Examiner is referred to those sections of the specification for written description support. New claims 53 and 54 point to specific instances of the invention where the resistance is obtained from a Chinese cabbage F1 hybrid 'Parkin' as well as a specific line described within the specification. CFL667.

The Examiner maintains that the Applicants were not in possession of the broad genus of *B. oleracea* plants having the claimed characteristics. The Examiner indicates that Applicants were only in possession of *B. oleracea* line CFL667.

An adequate written description for genetic material requires a precise definition, "such as by structure, formula, chemical name, or physical properties." See *Enzo Biochem Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 962-963, 970 (Fed. Cir.2002). The goal of the written description requirement is to clearly convey that an applicant has invented the subject matter which is claimed. See, for example, *In re Barker*, 559 F.2d 588, 592 (CCPA 1977). To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, *Moba, B.V. v. Diamond Automation, Inc.* 325 F.3d 1306, 1319, (Fed. Cir. 2003); and *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). The written description inquiry focuses on whether the specification reasonably conveys to one skilled in the art whether the applicant invented the claimed subject matter.

The instant specification provides written description support for the claims, as the specification describes the claimed characteristics. As discussed in detail in Applicants' previous response, the

In addition, the claimed limitations are described very early in the specification, for example, on page 2, the 2<sup>nd</sup> full describes an invention with the characteristics of claim 1 and on page 3 of the specification, lines 24-25, it is stated that "In another **preferred embodiment**, the resistance is obtainable from a clubroot resistant *B. rapa* plant, preferably from Chinese cabbage F1 hybrid Parkin." (emphasis added)

Applicants disagree with the Examiner's view that to provide an adequate written description, Applicants must have been in possession of every possible *B. oleracea* plant having the claimed characteristics. The Examiner argues that Applicant is claiming each and every *B. oleracea* plant having the claimed characteristics yet the specification does not provide evidence that Applicant was in possession of any *B. oleracea* plant other than line CFL667. It appears that the Examiner's reasoning is that the written description requirement requires an applicant to be in possession of every embodiment that falls within the scope of the claim. This is the wrong standard to use when determining whether the specification meets the written description requirement.

Written description is reviewed from the perspective of one of skill in the art at the time the application is filed. *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 863 (Fed. Cir. 1993). The specification need not disclose what is well known to those skilled in the art and preferably omits what is well known and already available to the public. *In re Buchner*, 929 F.2d 660, 661 (Fed. Cir. 1991).

As noted above, the specification adequately describes the characteristics that the claimed *B. oleracea* plants possess. Furthermore, Applicants had in their possession a *B. oleracea* line that possessed the claimed characteristics, i.e., *B. oleracea* line CFL667. The purpose of the written description requirement is to assure that the Applicant was in full possession of the claimed invention on the application filing date. In fact, the Federal Circuit has noted that examples are not necessary to support the adequacy of a written description. See, *Falkner v. Inglis*, 448 F.3d 1357, 79 USPQ2d 1001 (Fed. Cir. 2006). *Falkner* is clear that the written description standard may be met even where actual reduction to practice an invention is absent. As explained in *LizardTech, Inc. v. Earth Resource Mapping, PTY, Inc.*:

A claim will not be invalidated on section 112 grounds simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language. That is because the patent specification is written for a person of skill in the art, and such a person comes to the patent [office] with the knowledge of what has come before. Placed in context, it is unnecessary to spell out every detail of the invention in the specification; only enough must be included to convince a person of skill in the art that the inventor possessed the invention and to enable such a person to make and use the invention without undue experimentation.

424 F.3d 1336, 1345 (Fed. Cir. 2005) (citing *Union Oil Co. v. Atl. Richfield Co.*, 208 F.3d 989, 997 (Fed. Cir. 2000)); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

Accordingly, as Applicants have described *B. oleracea* plants having the claimed characteristics and have set forth an example in the specification, the written description requirement has been met.

Both the Written Description Guidelines as published by the USPTO and the case-law support Applicants' position. Following is an excerpt from the Written Description Guidelines (Written Description Requirement Guidelines published in the Federal Register/Vol. 66, No. 4/Friday January 5, 2001/Notices: pp. 1099-1111). A representative number of species means that the species which are adequately described are representative of the entire genus. Thus, when there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus. On the other hand, **there may be situations where one species adequately supports a genus.** What constitutes a "representative number" is an inverse function of the skill and knowledge in the art. Satisfactory disclosure of a "representative number" **depends on whether one of skill in the art would recognize that the applicant was in possession of the necessary common attributes or features of the elements possessed by the members of the genus in view of the species disclosed.** For inventions in an unpredictable art, adequate written description of a genus which embraces widely variant species cannot be achieved by disclosing only one species within the genus. **Description of a representative number of species does not require the description to be of such specificity that it would provide individual support for each species that the genus embraces.** [emphasis added]

The USPTO Written Description Guidelines provide that there may be situations where one species adequately supports a genus. The present application has provided an example of the claimed plants and further provided the characteristics of the claimed plants. The Guidelines further state that satisfactory disclosure of a "representative number" depends on whether one of skill in the art would recognize that the applicant was in possession of the necessary common attributes or features of the elements possessed by the members of the genus in view of the species disclosed. The present claims require the plants to comprise two characteristics. Those characteristics are fully described in the specification. One of skill in the art would certainly understand that the Applicant had possession of the claimed invention.

With regards to current U.S. case-law, in *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 18 USPQ 1016, 1021 (Fed. Cir. 1991), the Federal Circuit indicated that: "Conception does not occur unless one has a mental picture of the structure of the chemical, **or is able to define it by its method of preparation, its physical or chemical properties, or whatever characteristics sufficiently distinguish it**" [emphasis added]. *Amgen v. Chugai Pharmaceutical Co. Ltd.*, 18

USPQ 1016, 1021 (Fed. Cir. 1991). In the present application, Applicants have provided a sufficient definition of the physical and chemical properties by describing the distinguishing characteristics of the claimed plants. In fact, the *B. oleracea* line CFL667 provides definitive evidence that Applicants were in possession of a plant having the claimed characteristics. CFL667 is a representative example of the plants of the invention. The specification is replete with a description of CFL667 as a "representative line".

The methods for breeding *B. oleracea* plants are well known. One of skill in the art reading the specification would have readily known that Applicants were in possession of the claimed invention.

As set forth in *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345, 54 USPQ2d 1915, 1917 (Fed. Cir. 2000), the purpose of the written description requirement is to "ensure that the scope of the right to exclude, as set forth in the claims does not overreach the scope of the inventor's contribution to the field of the art as described in the patent specification." Here the claimed plants contain the two characteristics that are described in the specification. To that end, to satisfy the written description requirement, the inventor "must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention" [emphasis added]. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). As discussed above, Applicants have met that burden. For the foregoing reasons it is believed that an adequate written description of the subject matter is provided and the rejection should be withdrawn.

## CONCLUSION

Applicants respectfully submit that all outstanding issues in the present case have been addressed in this paper. Applicants request continued prosecution on the merits and allowance of the claims as presented herein. In the event issues remain that could be dealt with on the telephone, the Examiner is encouraged to call the undersigned attorney for Applicants at 919-765-5117.

Respectfully submitted,



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